

GALVANIC ISOLATORS [GxG-x]

Cable Products, Drop Passives

Taikan

Description

Taikan's galvanic isolator series are used to separate the subscriber's network equipment from the CATV network system as well as protect the network equipments from electrical hazards (i.e. voltage surges or lightning).

It is an effective and practical solution to prevent various types of hazardous surges from damaging Customer Premise Equipments (CPE).

Features

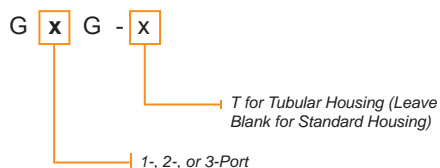
- Class A - CENELEC EN50083-2 (Screening Effectiveness)
- EN/IEC 60728-11:2010 (Safety Requirements)
- 5-1002 MHz Bandwidth with 2.3 GHz Model Available
- 1-, 2-, and 3-Port Splitter Design (1-Port Tubular Design Available)
- Protection for Subscriber's Premise Network Equipment Against Power Surges and Variabilities in Local Currents
- Superior Isolation and Return Loss for Return Path
- 2 kV DC Double Isolation Protection
- Standard Contact Pins
- Compact Design with Zinc Alloy Die-cast Housing & Tin Plated Soldered Back
- Two Ground Screws (Available)
- CE & RoHS Compliant



General Specifications

Voltage Isolation:	2 kV DC
F Connector:	SCTE Compliant IPS-SP 400
Operation Temperature:	-40 to 60 °C (-40 to 140 °F)
RFI Shielding:	-120 dB

Ordering Information



Model Number	Inner Box	Standard Carton	Carton Weight
G1G / G1W	10 pcs	300 pcs	20 kg / 44 lbs
G2G	10 pcs	300 pcs	21 kg / 46 lbs
G3G	10 pcs	300 pcs	22 kg / 48 lbs
G1G-T	10 pcs	300 pcs	20 kg / 44 lbs



		G1G One Port		G2G Two Port		G3G (Preliminary) † Three Port				G1G-T † One Port		
		Typ	Max	Typ	Max	Typ	Max	Typ	Max	Typ	Max	
Frequency	5-10 MHz	< 0.1	0.6	< 3.3	3.7	< 3.2	3.7	< 6.8	6.9	< 0.1	0.6	dB
	11-40 MHz	< 0.1	0.4	< 3.3	3.9	< 3.3	3.9	< 6.6	6.9	< 0.1	0.4	dB
	41-470 MHz	< 0.2	0.4	< 3.3	3.9	< 3.3	3.9	< 6.8	7.0	< 0.2	0.4	dB
	471-862 MHz	< 0.4	0.7	< 4.0	4.3	< 3.9	4.3	< 7.0	7.5	< 0.4	0.7	dB
	863-1000 MHz	< 0.4	0.7	< 4.3	4.4	< 4.2	4.4	< 7.8	8.0	< 0.4	0.7	dB

Input/Output Return Loss

		Min	Typ	Typ	Typ	Min	Typ	
		Frequency						
Frequency	5-10 MHz	18	> 18	> 18	> 18	18	> 18	dB
	11-470 MHz	18	> 20	> 18	> 18	18	> 20	dB
	471-862 MHz	18	> 20	> 18	> 18	18	> 20	dB
	863-1000 MHz	18	> 20	> 18	> 18	18	> 20	dB

Isolation Out to Out

		Typ	Typ	Typ	Typ	
		Frequency				
Frequency	5-10 MHz	x	> 20	> 20	x	dB
	11-470 MHz	x	> 20	> 20	x	dB
	471-862 MHz	x	> 22	> 22	x	dB
	863-1000 MHz	x	> 22	> 20	x	dB

Screening Effectiveness*

		Typ	Typ	Typ	Typ	
		Frequency				
Frequency	5-10 MHz	85	85	85	85	dB
	10-12 MHz	85	85	85	85	dB
	12-300 MHz	85	85	85	85	dB
	301-470 MHz	80	80	80	80	dB
	471-1000 MHz	75	75	75	75	dB

Inter modulation p+q**

		Max	Max	Max	Max	
After	25 V Surge	-120	-110	-110	-120	dB
	1 kV Surge	-120	-110	-110	-120	dB

† Class A Certification in Progress

Galvanic Isolation

		Ports	Max
2120 VDC ***	Inner Conductor (Input) to Inner Conductor (Output)		0.7 mA RMS
2120 VDC ***	Outer Conductor (Input) to Outer Conductor (Output)		0.7 mA RMS
230 VAC ****	Inner Conductor (Input) to Inner Conductor (Output)		8.0 mA RMS
230 VAC ****	Outer Conductor (Input) to Outer Conductor (Output)		8.0 mA RMS

Notes:

- * 5-30 MHz (Transfer Impedance Method According IEC 60728-2)
30-1000 MHz (Absorption Clamp Method According IEC-60728-2 Sec 4.4)
- Two carriers (60 & 65 MHz), Output to Input, @ 120dBuV, before surge
- ** Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 10 pulses (25 V/1.2 uS rise time/500 uS fall time) at all ports
Two carriers (60 & 65 MHz), Output to Input, @ 120 dBuV, after 1 pulse (1 KV/1.2 uS rise time/500 uS fall time) at all ports
- *** IEC-60728-11/10 Safety Requirements: 2120 VDC ≥ 1minute, I = ≤ 0.7 mA
- **** IEC-60728-11/10 Safety Requirements: 230 VAC, I = ≤ 8.0 mA (0 to 25 °C)